

DERWENT-ACC- 2001-341786

NO:

DERWENT-WEEK: 200241

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TITLE: Apparatus for biological processing of agricultural wastes

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PRIORITY-DATA: 1999RU-0103093 (February 16, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE PAGES MAIN-IPC
RU 2164893 C2	April 10, 2001 N/A	000 C02F 001/00

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR APPL-NO	APPL-DATE
RU 2164893C2 N/A	1999RU-0103093	February 16, 1999

INT-CL (IPC): C02F001/00, C02F003/00 , C02F011/04 , C12M001/33

ABSTRACTED-PUB-NO: RU 2164893C

BASIC-ABSTRACT:

NOVELTY - Apparatus has agricultural waste collector and methane tank connected to collector and including acid fermentation chamber, neutral fermentation chamber, alkali fermentation chamber, and methane fermentation chamber, with all fermentation chambers being equipped with dispersers. Methane fermentation chamber is communicated with fermenter having casing and light-transmitting walls. Illuminating devices are arranged at outer sides of light-transmitting walls. Fermenter casing is divided into sections by transverse perforated walls to which hollow glass balls are secured. Glass balls are adapted for cultivation of blue-green algae providing

processing of agricultural wastes. Sections are communicated via overflow pipes. Methane is directed from top section of fermenter via hydraulic gate into gas holder and onto gas turbine of drive for electric generator which generates electric power. Bottom section of fermenter is connected via centrifugal microfilter to belt-type press filter and to drier for protein-vitamin additive, which is produced by processing of excessive biomass of blue-green algae. Bottom section of fermenter is connected via microfilter to dynamic disintegrator including housing composed of two joined cylinders and incorporating two frictionally joined rotors. Blue-green cells are destructed in disintegrator, and heavy water accumulated in it is discharged into collector. Apparatus of such construction provides effective processing of agricultural wastes and allows additional products, such as methane, compost, protein-vitamin additives and heavy water to be obtained.

USE - Agriculture.

ADVANTAGE - Wider operational capabilities and enhanced reliability in operation. 1 dwg

CHOSEN-DRAWING: Dwg.1/1

TITLE-TERMS: APPARATUS BIOLOGICAL PROCESS AGRICULTURE WASTE

DERWENT-CLASS: D15

CPI-CODES: D04-A01F; D04-A01J; D05-A04A;

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